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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,712

Applicant(s)

CHENG ET AL.

Examiner

Andrew C. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/06/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 9/06/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is response to the Application no. 10591712 filed on 9/06/2008 is entered.

Claims 1 – 10 are hence entered and presented for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 11/16/2006, 9/06/2006 was filed, and the submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

5. Claim 4 is objected to because of the following informalities:

Regarding claim 4 on page 33 is a typo. The claim should be numbered as

9. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "each of a plurality of duplicated transmission packets" in lines 6 – 7; the limitation "the plurality of said transmission packets" in lines 9 – 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the number of duplications of the transmission packet" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the number of duplications of the transmission packet" in line 21; the limitation "the number of retransmissions of said transmission packets" in lines 22 – 23. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the number of duplications of the transmission packet" in line 27; the limitation "the number of radio communication terminal apparatuses belong to the same cell" in lines 1 – 3, page 33. There is insufficient antecedent basis for this limitation in the claim.

Claims 5 – 10 have the same deficiencies as disclosed in claim 1.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5, 6, 7, 8, 9, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe (US 6317854 B1).

Regarding claim 1, Watanabe disclose a random access method (Abstract, Fig. 3A, Fig. 3B, col. 7, lines 63 – 67) comprising: a duplication step of duplicating a transmission packet (*col. 5, lines 11 - 19, col. 6, lines 47 - 52*); an assignment step of assigning each of a plurality of duplicated transmission packets to a random access channel (*col. 7, lines 37 – 51*); and a transmission step of transmitting the plurality of said transmission packets in accordance with an assignment result in said assignment step (*Fig. 4, Fig. 7, col. 10, lines 23 – 47*).

Regarding claim 5, Watanabe discloses wherein, in said assignment step, each of the plurality of duplicated transmission packets are assigned to one of time slots in the random access *channel* ("*large number of time slots*"; *Fig. 4, col. 10, lines 23 – 47*).

Regarding claim 6, Watanabe discloses wherein, in said assignment step, each of the plurality of duplicated transmission packets are assigned to one of

subcarriers in the random access channel (*Fig. 2, col. 8, lines 35 – 64*).

Regarding claim 7, Watanabe discloses wherein, in said assignment step, each of the plurality of duplicated transmission packets are assigned to one of time slots and one of subcarriers in the random access channel (*Fig. 2, col. 8, lines 35 – 64*).

Regarding claim 8, Watanabe discloses wherein, in said assignment step, each of the plurality of duplicated transmission packets are assigned to one of antennas in the random access channel (*Fig. 1, col. 6, lines 24 – 34*).

Regarding claim 9, Watanabe discloses wherein, in said assignment step, each of the plurality of duplicated transmission packets are assigned randomly to one of time slots in the random access channel (*Fig. 4, col. 10, lines 23 – 47*).

Regarding claim 10, Watanabe discloses a radio communication terminal apparatus (*Abstract, Fig. 1, col. 6, lines 24 – 30, col. 7, lines 63 – 67*) comprising: a duplication section that duplicates a transmission packet (*Fig. 1, element 42, retransmission scheduler, col. 5, lines 11 – 19, col. 6, lines 47 – 52*); an assignment section that assigns each of the plurality of duplicated transmission packets to a random access channel (*col. 7, lines 37 – 51*); and a transmission section that transmits the plurality of transmission packets in accordance with an

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assignment result in said assignment section (*Fig. 1, element 28 TX circuitry, Fig. 4, Fig. 7, col. 10, lines 23 – 47*).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (US 6317854 B1) in view of Scholefield et al. (5752193).

Regarding claim 2, Watanabe disclose a random access method (Abstract, Fig. 3A, Fig. 3B, col. 7, lines 63 – 67) comprising: a duplication step of duplicating a transmission packet (col. 5, lines 11 - 19, col. 6, lines 47 – 52).

Watanabe does not disclose explicitly a determination step of determining the number of duplications of the transmission packet in said duplication step according to a priority of service planned after communication is started.

However, Scholefield et al. in the same field of endeavor teach a determination step of determining the number of duplications of the transmission packet in said duplication step according to a priority of service planned after communication is started (*"priority service parameters"; col. 5, lines 8 – 38*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Watanabe to include the features

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of determining the number of duplications of the transmission packet in said duplication step according to a priority of service planned after communication is started as taught by Scholefield et al. One of ordinary skill in the art would be motivated to do so for providing a system for allocating one or more subchannels based on priority of user data (*as suggested by Scholefield et al., see col. 2, lines 59 – 61*).

11. Claims 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (US 6317854 B1) in view of Buchholz et al. (5493569).

Regarding claim 3, Watanabe disclose a random access method (Abstract, Fig. 3A, Fig. 3B, col. 7, lines 63 – 67) comprising: a duplication step of duplicating a transmission packet (*col. 5, lines 11 – 19, col. 6, lines 47 – 52*).

Watanabe does not disclose explicitly a determination step of determining the number of duplications of the transmission packet in said duplication step according to the number of retransmissions of said transmission packet.

Buchholz et al. in the same field of endeavor teach a determination step of determining the number of duplications of the transmission packet in said duplication step according to the number of retransmissions of said transmission packet (*Fig. 8, element 820, “number of duplicate requests”; col. 9, lines 1 – 23*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Watanabe to include the features of a determination step of determining the number of duplications of the transmission packet in said duplication step according to the number of

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retransmissions of said transmission packet as taught by Buchholz et al. One of ordinary skill in the art would be motivated to do so for providing a system for allocating one or more sunchannels based on priority of user data (*as suggested by Buchholz et al., see col. 2, lines 59 – 61*).

Regarding claim 4, Watanabe disclose a random access method (Abstract, Fig. 3A, Fig. 3B, col. 7, lines 63 – 67) comprising: a duplication step of duplicating a transmission packet (*col. 5, lines 11 – 19, col. 6, lines 47 – 52*) and the number of radio communication terminal apparatuses belonging to the same cell and using said random access channel (*“multi-user communication system”, and “random access channel”; Fig. 1, col. Lines 27 – 27 – 34*).

Watanabe does not disclose explicitly a determination step of determining the number of duplications of the transmission packet in said duplication step according to the number of retransmissions of said transmission packet.

Buchholz et al. in the same field of endeavor teach a determination step of determining the number of duplications of the transmission packet in said duplication step according to the number of retransmissions of said transmission packet (*Fig. 8, element 820, “number of duplicate requests”; col. 9, lines 1 – 23*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Watanabe to include the features of a determination step of determining the number of duplications of the transmission packet in said duplication step according to the number of retransmissions of said transmission packet as taught by Buchholz et al. One of

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ordinary skill in the art would be motivated to do so for providing a system for allocating one or more sunchannels based on priority of user data (*as suggested by Buchholz et al., see col. 2, lines 59 – 61*).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<12/15/2008:1Qy09>

**/Edan Orgad/
Supervisory Patent Examiner, Art Unit 2419**